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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,994	06/29/2001	Jong Jin Park	49128-5019	5674

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EXAMINER

NGUYEN, JENNIFER T

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/893,994

Applicant(s)

PARK ET AL.

Examiner

Jennifer T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3 and 5-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-10 and 13-17 is/are allowed.
- 6) ☒ Claim(s) 2,3,11,12 and 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office action is responsive to amendment filed 4/7/2005.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 2-3 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 3 of copending Application No. 10/025,906 (Park et al.).

Present invention 09/893,994 (Park et al.)	copending Application No. 10/025,906 (Park et al.)
A method of driving a liquid crystal display including a liquid crystal display panel having pixels arranged in a matrix form, a gate driver for applying a scanning signal to gate lines of the liquid crystal display panel, and a data driver for supplying a picture data to data lines of the liquid crystal display panel (as claim 1)	A method of driving a liquid crystal display supplying data synchronized with said first scanning signal and said second scanning signal to a plurality of data lines formed in the manner of crossing with the plurality of said gate lines (as claim 1)
data driver supplies the picture data to the	supplying a first scanning signal to a first gate

data lines when the scanning pulse is applied to a first gate line of the two gate lines (as claim 2)	line positioned at a specific location among a plurality of gate lines for driving a liquid crystal cell (as claim 1) supplying picture data to the plurality of said data lines in synchronization with said first scanning signal (as claim 3)
supplies a black data to the data lines when the scanning pulse is applied to a second gate line of the two gate lines (as claim 2)	second scanning signal to a second gate line which is formed while having at least one gate line between said first gate line and said second gate line after said first gate line scanning signal has been supplied (as claim 1) supplying black data to the plurality of said data lines in synchronization with said second scanning signal (as claim 3)
applying first to third gate output enable signals to the gate driver (as claim 1)	

Although the conflicting claims are not identical, they are not patentably distinct from each other because the only difference between claims in the two applications is applying first to third gate output enable signals to the gate driver. In claims of copending application No. 10/025,906 does not specifically teach applying first to third gate output enable signals to the gate driver. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to obtain applying first to third gate output enable signals to the gate driver in order to control output of gate driver and to improve the image quality.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 2, 3, 11, 12, and 18-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Nose et al. (U.S. Patent No. 6,819,311).

Regarding claims 2 and 3, referring to Figs. 1 and 12, Nose teaches a method of driving a liquid crystal display including a liquid crystal display panel (1) having pixels (5) arranged in a matrix form, a gate driver for applying a scanning signal to gate lines (G1-Gn) of the liquid crystal display panel, and a data driver for supplying a picture data to data lines (D1-Dm) of the liquid crystal display panel, the method comprising the steps of:

applying a clock pulse (Vclk) to the gate driver;

applying first to third gate output enable signals (OE) to the gate driver; and

applying a scanning pulse to two gate lines (G1, G2) during one period of the clock pulse

(t3) wherein the data driver supplies the picture data (t1) to the data lines when the scanning pulse is applied to a first gate line of the two gate lines, and supplies a black data (t2) to the data lines when the scanning pulse is applied to a second gate line of the two gate lines (col. 8, line 42 to col. 9, line 7).

Regarding claim 11, referring to Fig. 1, Nose teaches a method of driving a liquid crystal display that is driven frame by frame, comprising the steps of:

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displaying a first picture (t1) on a liquid crystal display panel (1) in a current frame;
displaying a specific dummy picture (t2) on the liquid crystal display panel on which
first picture has been displayed; and

displaying a second picture over the specific dummy picture in a next frame (col. 8, line
42 to col. 9, line 7).

Regarding claim 12, Nose further teaches the specific dummy picture is a black picture
(col. 8, lines 20-22).

Regarding claims 18-20, referring to Figs. 1 and 12, Nose teaches a method for driving a
liquid crystal display panel (1), comprising:

selecting two gate lines (G1, G2) that are separated by a predetermined number of gate
lines;

providing picture signals (t1) to a row of pixels corresponding to one of the two selected
gate lines;

providing a reference signal (t2) to a row of pixels corresponding to the other one of the
two selected gates lines;

repeating for different pairs of gate lines (Gj, Gj+1) so that all rows of pixels are refreshed
by corresponding picture signals in one frame; wherein each frame so that updated picture
signals are provided to the pixels that bear the reference signal immediately prior to being
updated (col. 8, line 42 to col. 9, line 7).

Regarding claims 21-22, Nose teaches a horizontal band of pixels applied with the
reference signal sweeps an entire screen of the liquid crystal display panel from the top
to the bottom in each frame (col. 8, line 42 to col. 9, line 7).

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6. Claims 5-10 and 13-17 are allowed.
7. Applicant's arguments with respect to claims 2, 3, and 5-22 have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer T. Nguyen whose telephone number is 571-272-7696. The examiner can normally be reached on Mon-Fri: 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick N. Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Nguyen
06/17/05



PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER